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Patel et al.

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(54) **CANOLA VARIETY 45S56**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

8,859,858 B1 10/2014 Patel et al.
8,889,952 B1 * 11/2014 Patel A01H 5/10
435/430
9,095,106 B1 8/2015 Patel et al.

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OTHER PUBLICATIONS

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* cited by examiner

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(57) **ABSTRACT**

Provided is a canola variety designated 45S56 and seed, plants and plant parts thereof produced from a cross of inbred varieties. Methods for producing a canola variety comprise crossing canola variety 45S56 with another canola plant. Methods for producing a canola plant containing in its genetic material one or more traits introgressed into 45S56 through backcross conversion and/or transformation, and to the canola seed, plant and plant part produced thereby are described. Canola variety 45S56, the seed, the plant produced from the seed, plant parts and variants, mutants, and minor modifications of canola variety 45S56 are disclosed.

20 Claims, No Drawings